

**REMARKS/ARGUMENTS**

Responsive to the Official Action mailed July 2, 2003, applicant has revised the claims of her application in an earnest effort to place this case in condition for allowance. Specifically, independent claim 1 has been amended, and dependent claims 2 and 5 canceled. Reconsideration is respectfully requested.

By this response, applicant has particularly revised the claims of her application to recite with greater specificity the novel odor control absorbent article of her invention. The pending claims have been revised to more particularly recite the unique admixture of a hydroxydiphenyl ether and aliphatic acid carrier which provide the desired odor control function, with the claims further recited to specify that the admixture is *topically applied in aqueous form* to the base substrate material from which the disposable absorbent article is formed. It is respectfully maintained that this is in clear distinction from the prior art cited by the Examiner in her Action.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §102 and §103, with principal reliance upon PCT Publication No. WO 99/38451, to Nakamura, with further reliance upon U.S. Patent No. 6,287,634, to Beall et al. However, a careful study of these references shows that they fail to teach or suggest applicant's odor control absorbent article, as specifically claimed, and accordingly, the Examiner's rejections are respectfully traversed.

As disclosed in applicant's specification, highly desirable odor control for an absorbent article is achieved by forming an admixture of hydroxydiphenyl ether and an

aliphatic acid carrier, such as hexanedioic acid, as disclosed in Example 2. The ether and acid are combined with deionized water to provide the desired admixture in aqueous form, with the admixture thus topically applied to an associated base substrate material, in this Example, a nonwoven fabric formed from staple length polypropylene fiber.

It is respectfully maintained that such an odor control absorbent article is neither suggested nor taught by the principal Nakamura reference. Nakamura is specifically limited in its teachings to the formation of a *hydrogel-forming absorbent polymer*, including an absorbent polymer, and an associated anti-microbial agent. Significantly, this reference is specifically limited in its teachings to the coating of the hydrogel *particles* with the anti-microbial agent. There is *no teaching or suggestion* of topically applying an admixture, as specifically recited in applicant's claims, in an aqueous form to a base substrate material *selected from the group consisting of nonwoven fabrics, woven fabrics, polymeric films, and the combinations thereof*.

At page 6, line 25 of Nakamura, it is specifically stated:

In preferred embodiments, the HFAP is in the form of discrete units. More preferably, the HFAP particles are typically in the form of particles, sheets, films, cylinders, blocks, fibers, filaments, or other shaped elements. More preferably, the A-HFAP is particulate.

Again, this reference is limited in its teachings to the coating of hydrogel-particulate material with a microbial agent; there is no teaching or suggestion of coating a *fabric or film* with an aqueous admixture, as claimed.

As further discussed in Namakura, the recited "coating" is intended to be a term which is broad in nature, and does not teach or suggest topical application in aqueous form to a fabric or film, as claimed. At page 6, line 33 *et seq.* of Nakamura, it is stated:

As used herein, the term "coated with" means that the anti-microbial will be on at least a portion of the surface of at least some of the particles of the HFAP. Thus, the anti-microbial may be on only some of the particles, on all of the particles, on only a portion of the surface of some or all of the particles, or onto the entire surface of some or all of the particles. Preferably, the anti-microbial is on the entire surface of most, preferably all, of the particles of the HFAP.

Again, applicant must respectfully maintain that Nakamura *teaches away* from applicant's claimed invention, wherein a substrate in the form of a fabric or film is topically treated with an admixture, in aqueous form, of a hydroxydiphenyl ether and an aliphatic acid carrier. As will be recognized by those familiar with the art, such treatment is *separate and apart from* the incorporation of any superabsorbent polymer, as is known in the art, for manufacture of disposable absorbent articles.

In the Action, the Examiner has rejected claim 6 under 35 U.S.C. §103, with reliance upon the Nakamura reference in view of the Beall et al. reference. However, it is respectfully maintained that it would not be an obvious expedient to one skilled in the art to combine the diverse teachings of these references. As noted above, Nakamura is limited in its teachings to the incorporation of an anti-microbial compound with a hydrogel-forming polymer, with no teaching or suggestion of topical application of an admixture, in aqueous form, to an associated fabric or film substrate, as claimed. The

Examiner acknowledges that Nakamura fails to disclose the use of an aliphatic acid in the form of a hexanedioic acid. The Beall et al. reference is concerned with formation of intercalates and exfoliated materials, with the contemplated inclusion with a matrix polymer intending to improve one or more properties of the polymer, such as mechanical strength and/or high temperature characteristics (see column1, lines 47-64).

The Examiner makes reference to the disclosure in Beall et al., at column 2, lines 53 *et seq*, relating to "a wide variety of topically-active compounds". Beall et al. states that "such topically active compositions included cosmetic, industrial, and medicinal compounds that act upon contact with skin or air, or are used to adjust rheology of industrial greases and the like".

It is respectfully maintained that these teachings in Beall et al. clearly would not suggest to one skilled in the art to employ a hexanedioic acid, as claimed, in the claimed admixture of applicants' invention, which is topically applied, in aqueous form, to an associated substrate. The "acidic carrier" of the Nakamura patent is intended to provide liquid-absorption. In significant distinction, Beall et al. is directed to the formation of intercalates and exfoliates, such as in clay compounds. The use of these acids in the respective references is completely different and unrelated, and it is respectfully maintained that reliance upon the teachings of Beall et al. in modifying the teachings of Nakamura to arrive at the present invention is inappropriate.


Application No. 10/036,840  
Amendment dated November 3, 2003  
Reply to Office Action of July 2, 2003

Applicant respectfully notes the Examiner's provisional obviousness-type double patenting rejection. An appropriate Terminal Disclaimer will be filed in this or applicant's related application Serial No. 10/036,902, as appropriate.

In view of the foregoing, formal allowance of claims 1, 3, 4, and 6-11 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicant's attorneys, they may be reached at the number indicated below.

The Commissioner is hereby authorized to charge any additional fee which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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**CERTIFICATE OF MAILING**

I hereby certify that this Amendment is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on **November 3, 2003**.

